

“Parties” shall mean KMVLT, VDEQ and the Board. VDEQ and Board are sometimes collectively referred to herein as “VEDQ/Board,” when appropriate.

“Site” shall mean the area described in the VRP application, attached and incorporated herein as **Exhibit “A”** or, if VDEQ/Board approves KMVLT’s request to address a partial response action area, then only that portion (i.e., the partial response action area) of the area described in **Exhibit “A,”** as the same may be updated and modified by further agreement of the Parties.

“Site Characterization Report” shall mean the document that contains a delineation of the nature and extent of releases to all media, including the vertical and horizontal extent of the contaminants.

“Submerged” shall mean the land below the ordinary high water mark.

“Upland” shall mean the land above the ordinary high water mark.

“Work” shall mean all activities and requirements KMVLT is required to perform pursuant to this Agreement.

SECTION 5: VDEQ FINDINGS OF FACT

The Site is currently owned by KMVLT. Based on information available to VDEQ and KMVLT, the Site is or may be impacted with hazardous substances, including polynuclear aromatic hydrocarbons (“PAHs”).

The Site is located at 1000 Lansing Street, City of Norfolk, Virginia, and is bordered to the north by the Eastern Branch of the Elizabeth River; to the east by an abandoned building once used as a pickle factory; to the south by Indian River Road, and to the west by Colonna’s Shipyard. The earliest indication of the site description when it was occupied by Atlantic Creosoting and Wood Preserving Works Site (“ACWPW”) is provided in the 1922 American Wood Preservers Association (“AWOA”) proceedings.

In 1901, three creosoting cylinders were constructed on the ACWPW site. The cylinders measured 6.5 feet in diameter and 5.6, 6.8, and 10.5 feet long. Above ground storage tanks currently occupy the location of the cylinders.

In 1903, W.H. Wales, the General Manager of ACWPW, published an article that described the on-site creosoting facility. This article states that the plant consisted of three creosote cylinders or retorts having a capacity for treating 5,000 linear feet of pilings per day. The material for treatment was received by railcar and was loaded onto cars that ran on tracks called cylinder cars. The tracks for the cylinder cars extended through both ends of the creosote cylinders to the railroad tracks at either end of the cylinders. The treated materials were either carried to the pier by cylinder cars and loaded onto a vessel, or were loaded back onto the railcars for transport off site. The article indicates that the facility had a private railroad switch that placed the company

directly on the line with seven railroads and a pier with ample depth of water and berth for vessels.

In 1907, an article appeared in the Washington Post that details a large fire that occurred at the site. The article indicates that ACWPW was the second largest creosoting business in the world at the time. The date that the ACWPW ceased operations is not known. Based on aerial photographs and a Sanborn map, it appears that ACWPW ceased operations sometime in the early 1920s.

The use of the ACWPW site between 1920 and 1977 (the date that Allied Terminals, Inc. purchased the ACWPW site) is unknown. Allied Terminals, Inc. ("Allied Terminals") (formerly known as Chemphalt of Carolina, Inc.) purchased the property from Virginia Electric and Power Company and Colonna's Shipyard in 1978. Allied Terminals utilized the property as a barging terminal from 1978 to 1988, when the Allied Terminals converted the facility to a bulk liquid storage and transfer terminal. The property has been used as a bulk liquid storage and transfer terminal from 1988 to the present.

The Colonna's Shipyard is located adjacent to the west of the Site, on the south bank of the Elizabeth River. Two oil containment lagoons once existed in the northeast portion of the Colonna's property, directly adjacent to the drainage ditch separating the Colonna's property from the Site and the Colonna's river inlet. The lagoons were used for storage and disposal of hydraulic, light machine, motor and fuel oils. On May 9, 1991, the Virginia State Water Control Board issued a Consent Special Order for the Colonna's Shipyard. Known releases from this area are associated with pollution compliant cases PC# 86-0093 and PC# 91-0427.

The former ACWPW site, which includes the Site, is currently occupied by KMVLT, which acquired it from Allied Terminals in July 2013.

The following plans, reports, assessments and correspondence have previously been prepared with respect to the Site, submitted to VDEQ/Board and are hereby incorporated into this Agreement by reference:

1. Phase I Environmental Site Assessment ("ESA"), Allied Terminals, Inc. Property, 1000 Lansing Street, Norfolk, VA 23523, prepared by URS Corporation for Kinder Morgan Energy Partners, L.P. (April 2, 2013).
2. Final Preliminary Assessment, Atlantic Creosoting and Wood Preserving Works Site, Norfolk, Virginia, prepared by HydroGeoLogic, Inc. for U.S. Environmental Protection Agency, Region 3 (August 2009).
3. Atlantic Creosoting and Wood Preserving Works Site, Field Sampling Plan, Norfolk, Virginia, prepared by Techlaw, Inc. (June 2010).
4. Groundwater Characterization Study, prepared by IMS Environmental Services, Inc. for Allied Terminals, Inc. (May 11, 2009).

5. Sediment Sampling at the Former Atlantic Creosote and Wood Preserving Works, prepared by Elizabeth River Project for Virginia Department of Environmental Quality (May 22, 2012).
6. Revised Final Site Inspection Report for the Atlantic Creosoting and Wood Preserving Works, Norfolk, Virginia, prepared by Blueskies Environmental Associates, Inc. for Virginia Department of Environmental Quality (March 29, 2012).

The findings contained in the referenced documents provide sufficient evidence that, over the history of the Site prior to KMVLT's ownership, substances within the jurisdiction of the Board have been improperly disposed, treated, stored, transported or managed. Additionally, conditions at the Site predating KMVLT's ownership or operation constitute hazards and nuisances dangerous to human health, safety or the environment created by the improper disposal, treatment, storage, transportation or management of substances within the jurisdiction of the Board.

KMVLT has volunteered to perform the Work, and based on the information available, VDEQ/Board believes that the Work will be properly and promptly conducted by KMVLT in accordance with the requirements of this Agreement, its appendices and all other documents incorporated by reference. The Parties recognize that this Agreement has been negotiated in good faith and implementation of the Agreement will expedite the cleanup of the Site. The Parties agree that its terms, conditions and requirements are fair, reasonable, and in the public interest.

SECTION 6: AGREEMENT OF THE PARTIES

In consideration of the assurances set forth in **Section 12** of this Agreement and the other covenants and commitments of VDEQ/Board herein contained, KMVLT hereby agrees to comply with and implement all provisions of this Agreement, including but not limited to all appendices and documents incorporated by reference. KMVLT agrees to perform all Work in accordance with applicable local, state and federal statutes, regulations, ordinances, rules and guidance.

VDEQ shall timely review and provide KMVLT written comments on all required submittals as described in **Section 8** and other documents necessary to the successful completion of this Agreement. VDEQ shall have the right to observe field activities, including sampling and remedial activities, as appropriate.

SECTION 7: FORMAL NOTICES

Documents, including reports, approvals, notifications, disapprovals, and other correspondence to be submitted under this Agreement may be sent by email, certified mail (return receipt requested), hand delivery, overnight mail or by courier service to the following addresses. All correspondence pertaining to this Agreement will be entered into VDEQ's Enterprise Content Management ("ECM") system, which is VDEQ's official file of record. Documents to be submitted to VDEQ shall be sent to:

VDEQ: Chris Evans
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
chris.evans@deq.virginia.gov

KMLT: Richard Steinberg
Remediation Manager
Kinder Morgan Virginia Liquid Terminals, LLC
1001 Louisiana Street, Suite 1000
Houston, Texas 77002
richard_steinberg@kindermorgan.com

SECTION 8: SUBMITTALS, REMEDIAL ACTIONS AND SCHEDULES

Required submittals shall include Site Characterization Reports and Remedial Action Plans for both upland and submerged components of the Site. Site Characterization Reports shall contain a delineation of the nature and extent of releases to all media, including the vertical and horizontal extent of the contaminants.

In order to complete the voluntary cleanup activities necessary for Certification of Satisfactory Completion of Remediation ("Certification" or "Certificate") under the VRP, the Parties agree to submit (in the case of KMLT) and review (in the case of VDEQ) the following plans and reports according to the schedule specified below. A completion date is stated in number of days from completion of the previous milestone:

	TASK	Est Term	Total Days	Due
Upland	Effective Date		0	1-Jan-14
	Draft SCR Work Plan Submittal	45	45	15-Feb-14
	VDEQ Review	45	90	1-Apr-14
	KM Revisions, Final Submittal*	30	120	1-May-14
	SCR Field Investigation	210	330	27-Nov-14
	Draft SCR Report Submittal	180	510	26-May-15
	VDEQ Review	60	570	25-Jul-15
	KM Revisions, Final Submittal*	45	615	8-Sep-15
	Draft RAWP Submittal	195	810	21-Mar-16
	VDEQ RAWP Review	60	870	20-May-16
	KM Revisions, Final RAWP Submittal*	60	930	19-Jul-16
	Public Notice	60	990	17-Sep-16
	Permitting**	180	1170	16-Mar-17
	Remedy Construction	270	1440	11-Dec-17
	Demonstration of Completion Submittal	120	1560	10-Apr-18